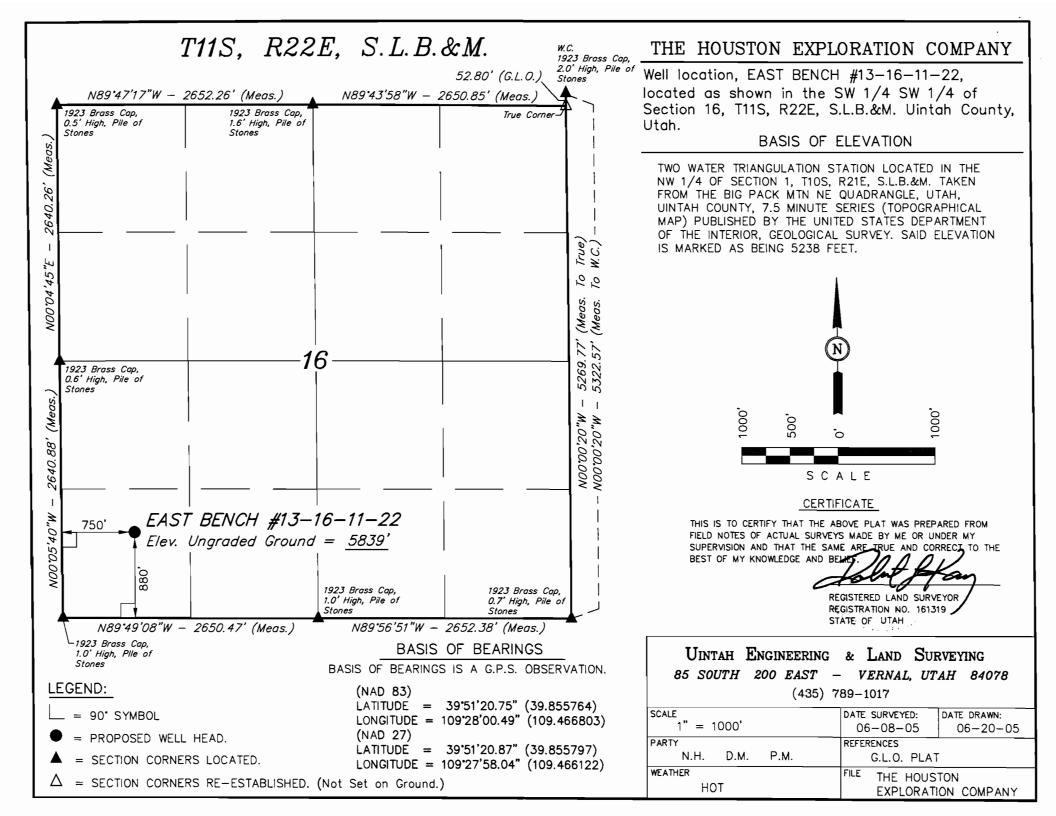
STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

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AMENDED REPORT (highlight changes)

		APPLICAT	ON FOR	PERMIT TO	DRILL			5. MINERAL LEAS ML-46911	SE NO:	6. SURFACE: State
1A. TYPE OF WO	DRK: D	RILL 🔽 F	EENTER [DEEPEN				7. IF INDIAN, ALL	OTTEE OR T	RIBE NAME:
B. TYPE OF WE		_	THER		_	MULTIPLE ZON	E ✓	8. UNIT or CA AG	REEMENT N	AME:
2. NAME OF OPE								9. WELL NAME at		
	xploration C	ompany						East Benc	_	
3. ADDRESS OF 1100 Louis	iana, Suite	2(Housto	n	TX 770	002	PHONE NUMBER: (713) 830-6800		10. FIELD AND P		LDCAT:
4. LOCATION OF	WELL (FOOTAGE	S)	6312	15 Y	39.855	872		11. QTR/QTR, SE MERIDIAN:		VNSHIP, RANGE,
AT SURFACE:	880' FSL 8	k 750' FWL		,				SWSW 1	6 118	3 22E
AT PROPOSED	PRODUCING ZOI	NE: same as	above	25714	107. 94	06024				
14. DISTANCE IN	MILES AND DIRE	CTION FROM NEAR	ST TOWN OR PO	ST OFFICE:	-			12. COUNTY:		13. STATE:
57.2 mile	s south of V	/emal, UT						Uintah		UTAH
15. DISTANCE TO	O NEAREST PROP	ERTY OR LEASE LIN	IE (FEET)	16. NUMBER OF	F ACRES IN LEAS	SE:	17. N	IMBER OF ACRES	ASSIGNED	TO THIS WELL:
750'						640				40
	O NEAREST WELL R) ON THIS LEASE	(DRILLING, COMPL.	ETED, OR	19. PROPOSED	DEPTH:		20. BC	OND DESCRIPTION	1 :	
1,000'		<u> </u>				8,425	. •	4155044		
	S (SHOW WHETHE	R DF, RT, GR, ETC.)			ATE DATE WORK	WILL START:	ı	STIMATED DURATI	ON:	
5,838'				9/15/200)5 		30	Days		
24.			PROPOS	ED CASING A	ND CEMEN	TING PROGRAM				
SIZE OF HOLE	CASING SIZE,	GRADE, AND WEIGH	IT PER FOOT	SETTING DEPTH		CEMENT TYPE, QUA	ANTITY,	YIELD, AND SLUR	RY WEIGHT	
11"	8 5/8"	J-55	36#		PREMIUM	I LITE II	250	SKS	3.38 CF	11.0 PPG
_	_				CLASS "G	<u> </u>	329	SKS	1.2 CF	15.6 PPG
					Calcium C	hloride	200	SKS	1.10 CF	15.6 PPG
7 7/8"	4 1/2"	N-80	11.6#	8,000	PREMIUM	I LITE II	200	SKS	3.3 CF	11.0 PPG
					CLASS "G)"	400	SKS	1.56 CF	14.3 PPG
					L Chments					
25.										 -
[7]				UTAH OIL AND GAS C	I 🖂	ENERAL RULES:		ONFID	FNTI	ΔI
_		ARED BY LICENSED			1 =					
✓ EVIDENO	CE OF DIVISION O	F WATER RIGHTS A	PPROVAL FOR US	E OF WATER	FOF	RM 5, IF OPERATOR IS PE	RSON O	R COMPANY OTH	ER THAN TH	IE LEASE OWNER
NAME /DI FASE	_{PRINT)} Willam	n A. Ryan			TITLE	Agent				
	11/11	W Cox			DATE	8/30/2005	_			
SIGNATURE (oc oun				DATE					
(This space for Sta	ite use only)						-		_	
		-				f	RE	ECEIVE	D	
API NUMBER AS	SIGNED.	43.047.	37130		APPROVAL:		SE	Png 200	5	

DIV. OF OIL, GAS & MINING



Ten Point Plan

The Houston Exploration Company

East Bench #13-16-11-22

Surface Location SW 1/4 SW 1/4, Section 16, T. 11S., R. 22E.

1. Surface Formation

Green River

2. Estimated Formation Tops and Datum:

Formation	Depth	Datum
Green River	Surface	+5,838' G.L.
Uteland Butte Limestone	3,669	+2,169'
Wasatch	3,784	+2,054'
Mesaverda	6,184	-346'
Buck Tounge	8,384	-2,546'
Castlegate	8,444	-2,606'
TD	8,425	-2,587

A 11" hole will be drilled to 2,000' +/-. The hole depth will depend on the depth that the Birds Nest Zone is encountered. The hole will be drilled 400' beyond the top of the Birds Nest.

3. Producing Formation Depth:

Formation objective includes the Green River, Wasatch, Mesaverde and its submembers.

Off Set Well information

Permitted/Drilled:

East Bench 2-16-11-22	East Bench 9-16-11-22
East Bench 4-16-11-22	East Bench 11-16-11-22
East Bench 5-16-11-22	East Bench 12-16-11-22
East Bench 6-16-11-22	East Bench 14-16-11-22
East Bench 8-16-11-22	East Bench 16-16-11-22

Producing Well:

SL #23-16

4. Proposed Casing:

Hole	Casing			Coupling	Casing	
Size	Size	Weight/FT	<u>Grade</u>	& Tread	Depth	New/Used
11	8 5/8	36#	J-55	STC	2000	NEW
7 7/8	4 1/2	11.6#	N-80	LTC	T.D.	NEW

Cement Program:

The Surface Casing will be cemented to the Surface as follows:

Lead:	Casing Size	Cement Type	Cement Amounts	Cement <u>Yield</u>	Cement Weight
Leau.	8 5/8	Premium Lite II .05#/sk Static Free .25#/sk Cello Flake 5#/sk KOL Seal .002 gps FP-6L 10% Bentonite .5% Sodium Metasil 3% Potassium Chlor		3.38ft³/sk	11.0 ppg
Tail:					
	8 5/8	Class "G" 2% Calcium Chlorid .25#/sk Cello Flake	329 sks. +/-	1.2ft³/sk	15.6 ppg
Top Jo	ob:				
	8 5/8	4% Calcium Chloride .25#/sk Cello Flake	200 sks. +/	/-1.10ft³/sk	15.6 ppg

Production casing will be cemented to 2,500' or higher as follows:

	Casing Size	Cement Type	Cement Amounts	Cement <u>Yield</u>	Cement Weight
Lead:					
	4 1/2	Premium Lite II .25#/sk Cello Flake .05#/sk Static Free 5#/sk Kol Seal 3% Potassium Chlor .055 gps FP-6L 10% Bentonite .5 Sodium Metasilic		3.3ft ³ /sk	11.0 ppg
Tail:					
	4 1/2	Class "G" .05% Static Free 2 Sodium Chloride .1% R-3 2% Bentonite	400 sks +/-	1.56ft ³ /sk	14.3 ppg

5. BOP and Pressure Containment Data:

The anticipated bottom hole pressure will be less than 3000 psi.

A 3000-psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 8 5/8" surface casing. The BOP system including the casing will be pressure tested to minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

6. Mud Program:

Interval	Mud weight <u>lbs./gal.</u>	Viscosity Sec./OT.	Fluid Loss M1/30 Mins.	Mud Type
0-2000	Air/Clear Water	30	No Control	Water/Gel
2000-T.D.	8.4-12.0		8-10	Water/Gel

7. Auxiliary Equipment

Upper Kelly cock, full opening stabbing valve, 2 ½" choke manifold and pit level indicator.

8. Testing, Coring, Sampling and Logging:

a)	Test:	None are anticipated.
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b) Coring: There is the possibility of sidewall coring.

c) Sampling: Every 10' from 2000' to T.D.

d) Logging: Type Interval

DLL/SFL W/GR and SP T.D. to Surf. Csg FDC/CNL W/GR and CAL T.D. to Surf. Csg

9. Abnormalities (including sour gas):

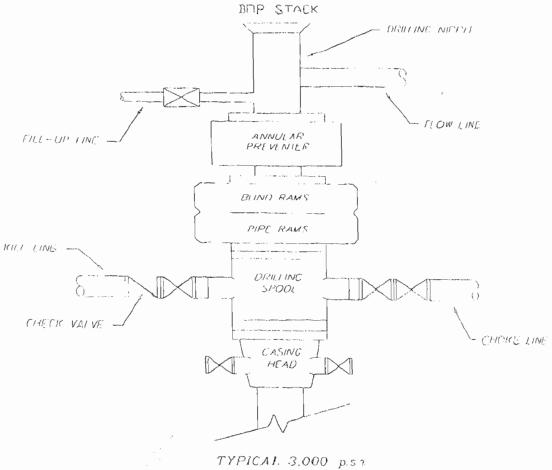
No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch Formation. Other wells drilled in the area have not encountered over pressured zones or H2S.

10. Drilling Schedule:

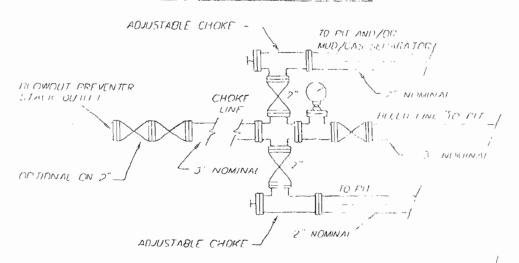
The anticipated starting date is $\underline{09/15/05}$. Duration of operations is expected to be 30 days.

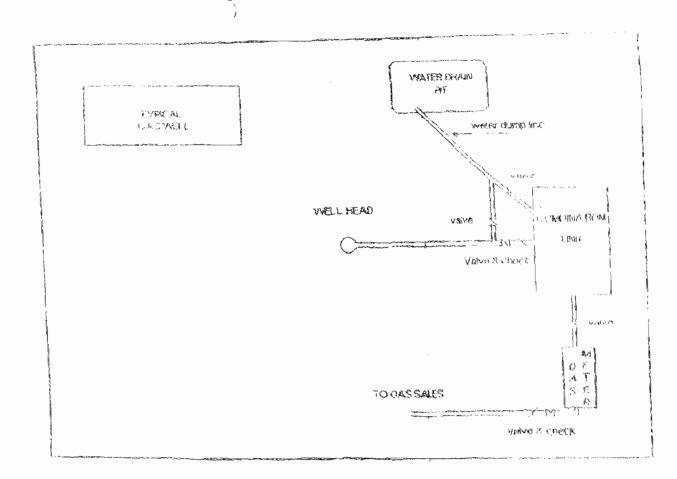
THE MOUSTON EXPLORATION COMPANY

TYPICAL 3,000 p.s.i BLOWOUT PREVENTER SCHEMATIC



TYPICAL 3,000 p.s.2 CHOKE MANIFOLD SCHEMATIC





THE HOUSTON EXPLORATION COMPANY 13 POINT SURFACE USE PLAN

FOR WELL

EAST BENCH 13-16-11-22

LOCATED IN SW 1/4 SW 1/4

SECTION 16, T. 11S, R22E, S.L.B.&M.

UINTAH COUNTY, UTAH

LEASE NUMBER: ML-46911

SURFACE OWNERSHIP: STATE

1. Existing Roads:

To reach The Houston Exploration Co. well East Bench 13-16-11-22 in Section 16, T11S, R 22E, Starting in Vernal, Utah.

Proceed in a westerly direction from Vernal, UT along US Highway 40 approximately 14.0 miles to the junction of State Hwy 88; exit left and proceed in a southerly direction approximately 17.0 miles to Ouray, UT; proceed in a southerly, then southeasterly direction approximately 11.2 miles on the Seep Ridge Road to the iunction of this road and an existing road to the southeast; turn left and proceed in a southeasterly direction approximately 9.2 miles to the junction of this road and an existing road to the southeast; turn right and proceed in a southerly direction approximately 4.9 miles to the junction of this road and an existing road to the northwest; turn right and proceed in a northwesterly, then southwesterly direction approximately 0.5 miles to the beginning of the proposed access road for the 14-16-11-22 to the southeast; follow road flags in a southeasterly, then southerly direction approximately 0.2 miles to the beginning of the proposed access road to the west; follow road flags in a westerly, then southwesterly direction approximately 0.2 miles to the proposed location.

Total distance from Vernal, Utah to the proposed well location is approximately 57.2 miles.

All existing roads to the proposed location are State of Utah, BLM maintained or County Class D roads. Please see the attached map for additional details.

2. Planned access road

The proposed access road will be approximately 1056' +/- of new construction on lease. The road will be graded once per year minimum and maintained.

45.4	10760
A) Approximate length	1056 ft
B) Right of Way width	30 ft
C) Running surface	18 ft
D) Surface material Na	tive soil
E) Maximum grade	5%
F) Fence crossing	None
G) Culvert	None
H) Turnouts	None
I) Major cuts and fills	None
J) Road Flagged	Yes
K) Access road surface	ownership
	State
L) All new construction	on lease

Please see the attached location plat

M) Pipe line crossing

for additional details.

Yes

None

An off lease right-of-way will not be required.

All surface disturbances for the road and location will be within the lease boundary.

3. Location of existing wells

The following wells are located within a one-mile radius of the location site.

A) Producing well SL 23-16

B) Water well
C) Abandoned well
D) Temp. abandoned well
E) Disposal well
None
None

F) Drilling /Permitted well
East Bench 2-16-11-22
East Bench 11-16-11-22
East Bench 4-16-11-22
East Bench 5-16-11-22
East Bench 12-16-11-22
East Bench 6-16-11-22
East Bench 14-16-11-22
East Bench 14-16-11-22
East Bench 8-16-11-22
East Bench 16-16-11-22

G) Shut in wells

None

H) Injection well

None

I) Monitoring or observation well

None

Please see the attached map for additional details.

4. Location of tank batteries, production facilities and production gathering service lines.

All production facilities are to be contained within the proposed location site. Please see the attached plat plan for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted an **Olive Black** color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is **Olive Black**.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

The operator will adhere to all site security guidelines and regulation identified in 43 cfr 3126.7.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval form the authorized officer.

If the well is capable of economic production a surface gas line will be required.

Approximately 1,299' +/- of 3" steel surface gas gathering line would be constructed on State Lands. The line will tie into the proposed pipeline for the 14-16-11-22 in Section 16, T11S, R22E. The pipeline would be strung and boomed to the east of the location and the north of the access road. The pipeline may be buried as determined by the Authorized Officer at the onsite.

An off lease right-of-way will not be required.

Please see the attached location diagrams for pipeline location.

The gas meter run will be located within 500' of the wellhead. The gas line will be buried or anchored down from the wellhead to the meter. Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meterproving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office and State of Utah, Division of Oil, Gas, and Mining. All measurement facilities will conform to API (American Petroleum Institute) and AGA (American Gas Association) standards for gas and liquid hydrocarbon measurement.

5. Location and type of water supply

Water for drilling and cementing will come from Bitter Creek in Permit #T-75377.

6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravel or pit lining material will be obtained from private resources.

- 7. Methods for handling waste disposal
 - A) Pit construction and liners:

The reserve pit will be approximately **12 ft**. deep and most of the depth shall be below the surface of the existing ground Please see the attached plat for details.

The reserve pit will be lined.

The reserve pit will be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90-day period an application for approval for permanent disposal method and location will be submitted to the authorized officer. Evaporation may be used instead of trucking to facilitate closing and reclamation of the reserve pit. A pumping system would be used for evaporation.

C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized landfill location.

D) Sewage:

A portable chemical toilet will be supplied for human waste.

E) Site clean-up:

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

8. Ancillary facilities

There are no ancillary facilities planned at this time and none are foreseen for the future.

Well-site layout

L) Flare Pit

Location dimensions are as follows:

A) Pad length	345 ft.
B) Pad width	245 ft.
C) Pit depth	12 ft.
D) Pit length	150 ft.
E) Pit width	75 ft.
F) Max cut	16.4 ft.
G) Max fill	6.0 ft.
H) Total cut yds.	6,790 cu yds
I) Pit location	west side
J) Top soil location	n east end
K) Access road loo	cation
1	northeast end

Please see the attached location diagram for additional details.

corner C

All pits will be fenced according to the following minimum standards:

A) Thirty nine inch net wire shall be used with at least one strand of wire on top of the net wire.

Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at leas 42 inches.
- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.
- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

10. Plans for restoration of the surface

Prior to construction of the location. the top 6 inches of soil material will be stripped off the location and the pit area. The topsoil removed and piled will amount to approximately **1,630** cubic yards of material. Topsoil will be stockpiled in one distinct pile. Placement of the topsoil is noted on the attached location plat. The topsoil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. When all drilling and completion activities have been completed and the pit back-filled the topsoil from the pit area will be

spread on the pit area. The pit area will be seeded when the soil has been spread. The unused portion of the location (the area outside the dead men) will be re-contoured.

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Changes to the drainage during the construction activities shall be restored to its original line of flow or as near as possible when the pit is back-filled

All disturbed areas will be recontoured to the approximate natural contours. Prior to back filling the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rainfall and run off from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert the run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

A) Seeding dates:

Seed will be spread when topsoil is stock piled and when reclamation work is performed.

The seed mix and quantity list will be used whether the seed is broadcast or drilled.

B) Seed Mix

To be determined by the Authorized Officer.

11. Surface ownership:

Access road State
Location State
Pipe line State

12. Other information:

A) Vegetation

The vegetation coverage is Slight. The majority of the existing vegetation consists of non-native species. Rabbit brush, bitter brush, and Indian Rice grass and Sagebrush are also found on the location.

B) Dwellings:

There are no dwelling or other facilities within a one-mile radius of the location.

C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all operations, which would affect such sites, will be suspended and the discovery reported promptly to the surface management agency.

D) Water:

The nearest water is the White River located 8 miles to the Northeast.

E) Chemicals:

No pesticides, herbicides or other possible hazardous chemicals will be used without prior application.

F) Notification:

- a) Location Construction At least forty eight (48) hours prior to construction of location and access roads.
- b) Location completion Prior to moving on the drilling rig.
- c) Spud notice At least twenty-four (24) hours prior to spudding the well.
- d) Casing string and cementing

- At least twenty-four (24) hours prior to running casing and cementing all casing strings.
- e) BOP and related equipment tests At least twenty-four (24) hours prior to initial pressure tests.
- f) First production notice Within five (5) business days after the new well begins, or production resumes after well has been off production for more than 90 days.

G) Flare pit:

The flare pit will be located in **corner C** of the reserve pit out side the pit fences and 100 feet from the bore hole on the east side of the location. All fluids will be removed from the pit within 48 hours of occurrence.

13. Lessees or Operator's representative and certification

A) Representative

William A. Ryan Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

Office 435-789-0968 Fax 435-789-0970 Cellular 435-828-0968

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws,

regulations, onshore oil and gas orders, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval.

After permit termination, a new application will be filed for approval for any future operations.

B) Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be preformed by The Houston **Exploration Company and its** contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

Date B. 30. 2005

William A. Ryan, Agent Rocky Mountain Consulting **Onsite Dates:**

Statement of use of Hazardous Materials

No chemical(s) from the EPA's consolidated list of Chemicals subject to Reporting under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986 will be used, produced, transported, stored, disposed, or associated with the proposed action. No extremely hazardous substances, as defined in 40 cfr 355, will be used, produced, stored, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan Agent for The Houston Exploration Company Rocky Mountain Consulting 290 S 800 E Vernal, UT 84078

435-789-0968 Office 435-828-0968 Cell 435-789-0970 Fax

THE HOUSTON EXPLORATION COMPANY

EAST BENCH #13-16-11-22

LOCATED IN UINTAH COUNTY, UTAH SECTION 16, T11S, R22E, S.L.B.&M.

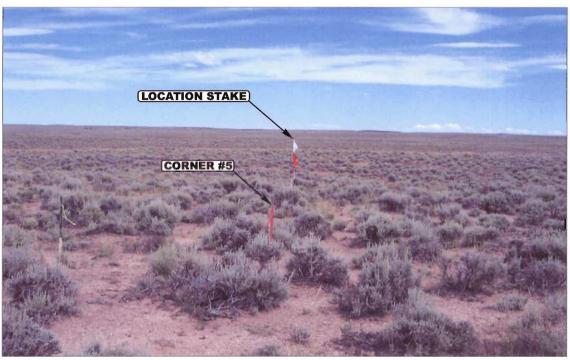


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: SOUTHEASTERLY

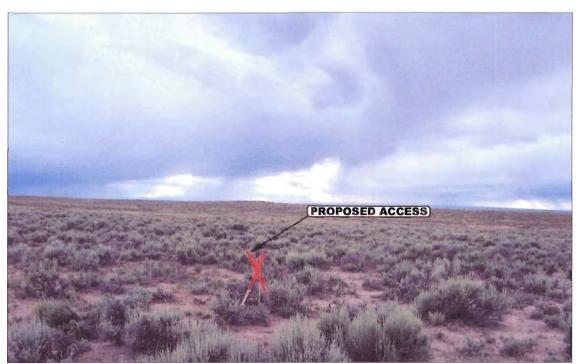


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: WESTERLY



LOCATION	PHOTOS	6 MONTH	10 DAY	05 YEAR	рното
TAKEN BY: N.H.	DRAWN BY: J.L.	G. REV	ISED: 0	0-00-00	

